

CLAIMS

I claim:

1. A computer-readable medium having stored thereon a data structure, the data structure separating storage of an attribute value from handling of the attribute value, the data structure comprising:
 - a) a model element class for implementing the constructs described by meta-data;
the model element class storing an attribute value;
 - b) a meta-attribute information object for describing attributes of the model element class; and
 - c) a model element field handler object for accessing the attribute value stored in the model element class.
2. The computer-readable medium of claim 1, wherein the attribute value is stored in a private member field of the model element class.

3. The computer-readable medium of claim 1, wherein the model element field handler object comprises a singleton pattern.
4. The computer-readable medium of claim 1, wherein the model element field handler object sets the attribute value sorted in the model element class.
5. The computer-readable medium of claim 1, wherein the model element field handler comprises a typed model element field handler subclass.
6. The computer-readable medium of claim 5, wherein the typed model element field handler subclass defines a get value function for accessing the attribute value.
7. The computer-readable medium of claim 5, wherein the typed model element field handler subclass defines a set value function for setting the attribute value.
8. The computer-readable medium of claim 1, wherein the data structure further comprises
 - d) a meta-class information object for storing data associated with the model element.

9. A computer-readable medium having stored thereon a data structure, the data structure separating storage of an attribute value from handling of the attribute value, the data structure comprising:

- a) a container for storing meta-data in a tree structure;
 - b) a model element class for implementing the constructs described by meta-data;
the model element class storing an attribute value;
 - c) a meta-class information object for storing data associated with the model
element;
 - d) a meta-attribute information object for describing attributes of the model element
class; and
 - e) a model element field handler object for accessing the attribute value stored in the
model element class.
10. The computer-readable medium of claim 9, wherein the container comprises a store
acting as the root of the tree structure.

11. The computer-readable medium of claim 9, wherein the model element field handler object comprises a singleton pattern.

12. The computer-readable medium of claim 9, wherein the model element field handler object sets the attribute value stored in the model element class.

13. The computer-readable medium of claim 9, wherein the model element field handler comprises a typed model element field handler subclass.

14. The computer-readable medium of claim 12, wherein the typed model element field handler subclass defines a get value function for accessing the attribute value.

15. The computer-readable medium of claim 12, wherein the typed model element field handler subclass defines a set value function for setting the attribute value.

16. A method of accessing an attribute value within a data structure, the data structure separating storage of the attribute value from handling of the attribute value, the method comprising:

- a) storing the attribute value in a private member field of a model element class;
 - b) declaring a nested handler class, the nested handler class being a subclass of a generic handler class;
 - c) issuing a get value function to obtain the attribute value from the model element class; and
 - d) receiving the attribute value from the model element class.
17. The method of claim 16, wherein the nested handler class inherits base functionality from the generic handler class.
18. A method of setting an attribute value within a data structure, the data structure separating storage of the attribute value from handling of the attribute value, the method comprising:

- a) declaring a nested handler class, the nested handler class being a subclass of a generic handler class;
 - b) issuing a set value function to set the attribute value for the model element class;
 - c) setting the attribute value; and
 - d) storing the attribute value in the model element class.
19. The method of claim 18, wherein the nested handler class inherits base functionality from the generic handler class.